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August 25, 2000

Assistant Commissioner for Patents
Washington, D.C. 20231



Art Unit: 1632

Re: U.S. Utility Patent Application
Appl. No. 09/580,463; Filed: May 26, 2000
For: **Cytofectin Dimers and Methods of Use Thereof**
Inventors: **WHEELER, Carl J.**
Our Ref: 1530.0220001/JMC/MJD

Sir:

Transmitted herewith for appropriate action are the following documents:

1. Information Disclosure Statement (in duplicate);
2. Form PTO-1449 (19 pages, citing 68 documents);
3. Sixty-eight (68) cited documents (AA1, AB1, AC1, AD1, AE1, AF1, AG1, AH1, AI1, AJ1, AK1, AL1, AR1, AS1, AT1, AA2, AR2, AS2, AT2, AR3, AS3, AT3, AR4, AS4, AT4, AR5, AS5, AT5, AR6, AS6, AT6, AR7, AS7, AT7, AR8, AS8, AT8, AR9, AS9, AT9, AR10, AS10, AT10, AR11, AS11, AT11, AR12, AS12, AT12, AR13, AS13, AT13, AR14, AS14, AT14, AR15, AS15, AT15, AR16, AS16, AT16, AR17, AS17, AT17, AR18, AS18, AT18, and AR19); and
4. One (1) return postcard.

It is respectfully requested that the attached postcard be stamped with the date of filing of these documents, and that it be returned to our courier. In the event that extensions of time are necessary to prevent abandonment of this patent application, then such extensions of time are hereby petitioned.

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

Assistant Commissioner for Patents
August 25, 2000
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The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036. A duplicate copy of this letter is enclosed.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.


John M. Covert
Attorney for Applicants
Registration No. 36,688

JMC/MJD/rjv
Enclosures

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

WHEELER, Carl J.

Appl. No. 09/580,463

Filed: May 26, 2000

For: **Cytofectin Dimers and Methods of
Use Thereof**



Art Unit: 1632

Examiner: *To Be Assigned*

Atty. Docket:
1530.0220001/EKS/JMC/MJD

Information Disclosure Statement

Commissioner for Patents
Washington, D.C. 20231

Sir:

Listed on accompanying Form PTO-1449 are documents that may be considered material to the examination of this application, in compliance with the duty of disclosure requirements of 37 C.F.R. §§ 1.56, 1.97 and 1.98.

The Examiner's attention is directed to related, commonly assigned, co-pending U.S. Appl. No. 08/565,756, filed November 30, 1995, and U.S. Appl. No. 09/092,486, filed June 5, 1998. The identification of the above U.S. Patent Applications is not to be construed as a waiver of secrecy as to the application now or upon issuance of the present application as a patent. The Examiner is respectfully requested to consider the cited application and the art cited therein during examination.

Where the publication date of a listed document does not provide a month of publication, the year of publication of the listed document is sufficiently earlier than the effective U.S. filing date and any foreign priority date so that the month of publication is not in issue. Applicants have listed publication dates on the attached PTO-1449 based on information presently available

to the undersigned. However, the listed publication dates should not be construed as an admission that the information was actually published on the date indicated.

Applicants reserve the right to establish the patentability of the claimed invention over any of the information provided herewith, and/or to prove that this information may not be prior art, and/or to prove that this information may not be enabling for the teachings purportedly offered.

This statement should not be construed as a representation that a search has been made, or that information more material to the examination of the present patent application does not exist. The Examiner is specifically requested not to rely solely on the material submitted herewith. It is further understood that the Examiner will consider information that was cited or submitted to the U.S. Patent and Trademark Office in a prior application relied on under 35 U.S.C. § 120. 1138 OG 37, 38 (May 19, 1992).

This Information Disclosure Statement is being filed within three months of the U.S. filing date or before the mailing date of a first Office Action on the merits. No statement or fee is required.

It is respectfully requested that the Examiner initial and return a copy of the enclosed PTO-1449, and indicate in the official file wrapper of this patent application that the documents have been considered.

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036. A duplicate copy of this pleading is enclosed.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.



John M. Covert
Attorney for Applicant
Registration No. 38,759

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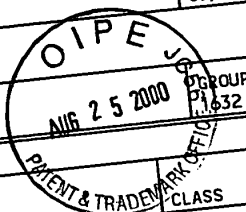
FORM PTO-1449
INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.
1530.0220001

APPLICATION NO.
09/580,463

APPLICANT
WHEELER, Carl

FILING DATE
May 26, 2000



U.S. PATENT DOCUMENTS

INFORMATION DISCLOSURE STATEMENT			FILING DATE May 26, 2000		PATENT & TRADEMARK OFFICE		
U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA1	4,713,339	12/15/1987	Levinson et al.	435	240.2	01/19/1983
	AB1	4,897,355	01/30/1990	Eppstein et al.	435	240.2	01/07/1985
	AC1	4,965,196	10/23/1990	Levinson et al.	435	691	01/19/1983
	AD1	5,264,618	11/23/1993	Felgner et al.	560	224	04/19/1990
	AE1	5,334,761	08/02/1994	Gebeyehu et al.	564	197	08/28/1992
	AF1	5,459,127	10/17/1995	Felgner et al.	514	7	09/16/1993
	AG1	5,580,859	12/03/1996	Felgner et al.	514	44	03/18/1994
	AH1	5,589,466	12/31/1996	Felgner et al.	514	44	01/06/1995
	AI1	5,676,954	10/14/1997	Brigham	424	450	05/08/1995
	AJ1	5,693,622	12/02/1997	Wolff et al.	514	44	06/07/1995
	AK1	5,703,055	12/30/1997	Felgner et al.	514	44	01/26/1994
FOREIGN PATENT DOCUMENTS					CLASS	SUB-CLASS	TRANSLATION

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AL1	WO 94/29469	12/22/1994	WIPO		Yes No
	AM1					Yes No
	AN1					Yes No
	AO1					Yes No
	AP1					Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

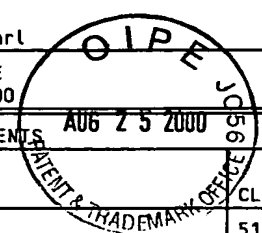
✓	AR	1	Agadjanyan, M.G., et al., "An HIV type 2 DNA Vaccine Induces Cross-Reactive Immune Responses against HIV type 2 and SIV," <i>AIDS Res. Hum. Retroviruses</i> 13(18):1561-1572 (December 1997).
✓	AS	1	Agadjanyan, M.G., et al., "DNA Plasmid Based Vaccination Against the Oncogenic Human T Cell Leukemia Virus Type 1," <i>Curr. Top. Microbiol. Immunol.</i> 226:175-192 (1998).
✓	AT	1	Altman-Hamamdizic, S., et al., "Expression of β -galactosidase in mouse brain: utilization of a novel nonreplicative Sindbis virus vector as a neuronal gene delivery system," <i>Gene Ther.</i> 4(8):815-822 (August 1997).

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

FORM PTO-1449 INFORMATION DISCLOSURE STATEMENT				ATTY. DOCKET NO. 1530.0220001		APPLICATION NO. 09/580,463	
				APPLICANT WHEELER, Carl			
				FILING DATE May 26, 2000		GROUP 1632	



U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA2	5,861,397	01/19/1999	Wheeler	514	247	10/03/1996
	AB2						
	AC2						
	AD2						
	AE2						
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FOREIGN PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AL2						Yes No
	AM2						Yes No
	AN2						Yes No
	AO2						Yes No
	AP2						Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)			
✓	AR	2	Bangham, <i>et al.</i> , "Diffusion of Univalent Ions across the Lamellae," <i>J. Mol. Biol.</i> 23:238-252 (1965).
✓	AS	2	Behr, J.P., <i>et al.</i> , "Efficient gene transfer into mammalian primary endocrine cells with lipopolyamine-coated DNA," <i>Proc. Natl. Acad. Sci. U S A.</i> 86(18):6982-6986 (September 1989).
✓	AT	2	Boyer, J.D., <i>et al.</i> , "In vivo protective anti-HIV immune responses in non-human primates through DNA immunization," <i>J. Med. Primatol.</i> 25(3):242-250 (June 1996).

EXAMINER	DATE CONSIDERED
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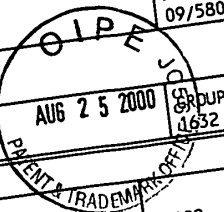
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WHEELER, Carl

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APPLICATION NO.
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	AA3					
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FOREIGN PATENT DOCUMENTS

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	AL3					Yes No
	AM3					Yes No
	AN3					Yes No
	AO3					Yes No
	AP3					Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

<input checked="" type="checkbox"/>	AR	3	Boyer, J.D., et al., "DNA Vaccination as Anti-Human Immunodeficiency Virus Immunotherapy in Infected Chimpanzees," J. Infect. Dis. 176(6):1501-1509 (December 1997).
<input checked="" type="checkbox"/>	AS	3	Boyer, J.D., et al., "Protection of chimpanzees from high-dose heterologous HIV-1 challenge by DNA vaccination," Nature Med. 3(5):526-532 (May 1997).
<input checked="" type="checkbox"/>	AT	3	Davis, H.L., "Plasmid DNA expression systems for the purpose of immunization," Curr. Opin. Biotechnol. 8(5):635-646 (October 1997).

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EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY			Yes No
	AL3					Yes No
	AM3					Yes No
	AN3					Yes No
	AO3					Yes No
	AP3					Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

✓	AR	4	Davis, H.L., et al., "DNA-based immunization against hepatitis B surface antigen (HBsAg) in normal and HBsAg-transgenic mice," Vaccine 15(8):849-852 (June 1997).
/	AS	4	Davis, H.L., et al., "Direct gene transfer in skeletal muscle: plasmid DNA-based immunization against the hepatitis B virus surface antigen," Vaccine 12(16):1503-1509 (December 1994).
✓	AT	4	Davis, H.L., et al., "Immune-mediated destruction of transfected muscle fibers after direct gene transfer with antigen-expressing plasmid DNA," Gene Ther. 4(3):181-188 (March 1997).

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WHEELER, CarlFILING DATE AUG 25 2000
May 26, 2000GROUP
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U.S. PATENT DOCUMENTS

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	AM3						Yes No
	AN3						Yes No
	AO3						Yes No
	AP3						Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

✓	AR	5	DeBruyne, L.A., <i>et al.</i> , "Lipid-mediated gene transfer of viral IL-10 prolongs vascularized cardiac allograft survival by inhibiting donor-specific cellular and humoral immune responses," <i>Gene Ther.</i> 5(8):1079-1087 (August 1998).
✓	AS	5	Duzgunes, N., "Membrane fusion," in <i>Subcellular Biochemistry</i> . Roodyn, D.B., ed., Plenum Press, New York, Vol. 11, pp.195-286 (1985).
✓	AT	5	Etchart, N., <i>et al.</i> , "Class I-restricted CTL induction by mucosal immunization with naked DNA encoding measles virus haemagglutinin," <i>J. Gen. Virol.</i> 78 (Pt 7):1577-1580 (July 1997).

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	AL3					Yes No
	AM3					Yes No
	AN3					Yes No
	AO3					Yes No
	AP3					Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

✓	AR	6	Felgner, P.L., et al., "Lipofection: A highly efficient, lipid-mediated DNA-transfection procedure," <i>Proc. Natl. Acad. Sci. U S A.</i> 84(21):7413-7417 (November 1987).
✓	AS	6	Felgner, J.H., "Separation and Quantitation of Cationic Liposome Components by High Performance Liquid Chromatography with Evaporative Light-Scattering Detection," <i>Pharm Res.</i> 14(9):1269-1271 (September 1997).
✓	AT	6	Felgner, P.L., "Nonviral Strategies for Gene Therapy," <i>Sci. Am.</i> 276:102-106 (June 1997).

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	AN3					Yes No
	AO3					Yes No
	AP3					Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

<input checked="" type="checkbox"/>	AR	Z	Fukunaga, M., et al., "Liposome Entrapment Enhances the Hypocalcemic Action of Parenterally Administered C," <i>Endocrinology</i> 115(2):757-761 (August 1984).
<input checked="" type="checkbox"/>	AS	Z	Gramzinski, R.M., et al., "Immune Response to a Hepatitis B DNA Vaccine in Aotus Monkeys: A Comparison of Vaccine Formulation, Route, and Method of Administration," <i>Mol Med.</i> 4(2):109-118 (February 1998).
<input checked="" type="checkbox"/>	AT	Z	Gregoriadis, G., et al., "Liposome-mediated DNA vaccination," <i>FEBS Lett.</i> 402(2-3):107-110 (February 1997).

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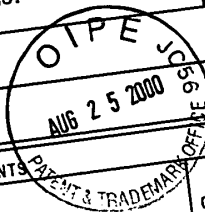
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OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

✓	AR	8	Hartikka, J., et al., "An Improved Plasmid DNA Expression Vector for Direct Injection into Skeletal Muscle," <i>Human Gene Ther.</i> 7(10):1205-1217 (June 1996).
✓	AS	8	Heppel, J., et al., "Development of DNA vaccines for fish: vector design, intramuscular injection and antigen expression using viral haemorrhagic septicaemia virus genes as model," <i>Fish and Shellfish Immunol.</i> 8:271-286 (1998).
✓	AT	8	Horn, et al., "Cancer Gene Therapy Using Plasmid DNA: Purification of DNA for Human Clinical Trials," <i>Human Gene Ther.</i> 6:656-573 (1995).

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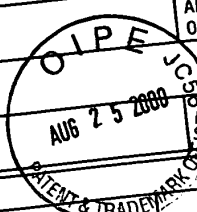
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WHEELER, Carl

FILING DATE
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APPLICATION NO.
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U.S. PATENT DOCUMENTS

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	AP3					Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

✓	AR	2	Ishii, N., et al., "Cationic LiposomesA a Strong Adjuvant for a DNA Vaccine of Human Immunodeficiency Virus Type 1, " AIDS Res. Hum. Retroviruses 13(16):1421-1428 (November 1997).
✓	AS	2	Kim, S., et al., "Preparation of Multivesicular Liposomes," Biochim. Biophys. Acta 728:339-348 (1983).
✓	AT	2	Klavinskis, L.S, et al., "Mucosal immunization with DNA-liposome complexes," Vaccine 15(8):818-820 (June 1997).

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	AP3						Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

✓	AR	10	Klavinskis, L.S., <i>et al.</i> , "Intranasal Immunization with Plasmid DNA-Lipid Complexes Elicits Mucosal Immunity in the Female Genital and Rectal Tracts," <i>J. Immunol.</i> 162(1):254-262 (January 1999).
✓	AS	10	Lodmell, D.L., <i>et al.</i> , "Gene gun particle-mediated vaccination with plasmid DNA confers protective immunity against rabies virus infection," <i>Vaccine</i> 16(2-3):115-118 (January-February 1998).
✓	AT	10	Lodmell, D.L., <i>et al.</i> , "DNA immunization protects nonhuman primates against rabies virus," <i>Nature Med.</i> 4(8):949-952 (August 1998).

EXAMINER	DATE CONSIDERED
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APPLICANT
WHEELER, Carl

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APPLICATION NO.
09/580,463

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	AP3					Yes
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OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

✓	AR	11	Mayer, L.D., et al., "Vesicles of variable sizes produced by a rapid extrusion procedure," <i>Biochim. Biophys. Acta.</i> 858(1):161-168 (June 1986).
✓	AS	11	Mayhew, E., et al., "Characterization of Liposomes Prepared Using a Microemulsifier," <i>Biochim. Biophys. Acta.</i> 775(2):169-174 (August 1984).
✓	AT	11	Nishizawa, et al., "Anion Recognition by Urea and Thiourea Groups: Remarkably Simple Neutral Receptors for Dihydrogenphosphate," <i>Tetrahedron Lett.</i> 36(36):6483-6486 (1995).

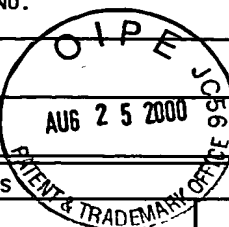
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✓	AR	<u>12</u>	Okada, E., <i>et al.</i> , "Intranasal Immunization of a DNA Vaccine with IL-12- and Granulocyte-Macrophage Colony-Stimulating Factor (GM-CSF)-Expressing Plasmids in Liposomes Induces Strong Mucosal and Cell-Mediated Immune Responses Against HIV-1 Antigens," <i>J. Immunol.</i> 159(7):3638-3647 (October 1997).
✓	AS	<u>12</u>	Olson, F., <i>et al.</i> , "Preparation of Liposomes of Defined Size Distribution by Extrusion Through Polycarbonate Membranes," <i>Biochim. Biophys. Acta.</i> 557(1):9-23 (October 1979).
✓	AT	<u>12</u>	Qin, Y.J., <i>et al.</i> , "Gene Suture--A Novel Method for Intramuscular Gene Transfer and its Application in Hypertension Therapy," <i>Life Sci.</i> 65(21):2193-2203 (1999).

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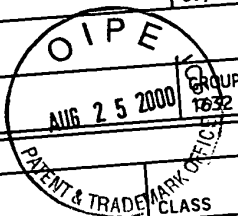
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OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

✓	AR	13	Sambrook, et al., in <i>Molecular Cloning. A Laboratory Manual</i> , 2 nd ed., Cold Spring Harbor Laboratory Pres, p. A-2 (1989).
✓	AS	13	Sasaki, S., et al., "Monophosphoryl Lipid A Enhances Both Humoral and Cell-Mediated Immune Responses to DNA Vaccination Against Human Immunodeficiency Virus Type 1," <i>Infect. Immun.</i> 65(9):3520-3528 (September 1997).
✓	AT	13	Sasaki, S., et al., "Adjuvant effect of Ubenimex on a DNA vaccine for HIV-1," <i>Clin. Exp. Immunol</i> 111(1):30-35 (January 1998).
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OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

✓	AR	14	Sasaki, S., <i>et al.</i> , "Induction of Systemic and Mucosal Immune Responses to Human Immunodeficiency Virus Type 1 by a DNA Vaccine Formulated with QS-21 Saponin Adjuvant via Intramuscular and Intranasal Routes," <i>J. Virol.</i> 72(6):4931-9 (June 1998).
✓	AS	14	Schrijver, R.S., <i>et al.</i> , "Immunization of cattle with a BHV1 vector vaccine or a DNA vaccine both coding for the G protein of BRSV," <i>Vaccine</i> 15(17-18):1908-1916 (December 1997).
✓	AT	14	Stephan, D.J., <i>et al.</i> , "A New Cationic Liposome DNA Complex Enhances the Efficiency of Arterial Gene Transfer <i>In Vivo</i> ," <i>Human Gene Ther.</i> 7(15):1803-1812 (October 1996).

EXAMINER

DATE CONSIDERED

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<input checked="" type="checkbox"/>	AR	15	Strauss, J.K., et al., "DNA bending by hexamethylene-tethered ammonium ions," <i>Proc. Natl. Acad. Sci. U S A.</i> 93(18):9515-9520 (September 1996).
<input checked="" type="checkbox"/>	AS	15	Szoka, F., et al., "Procedure for preparation of liposomes with large internal aqueous space and high capture by reverse-phase evaporation," <i>Proc. Natl. Acad. Sci. U S A.</i> 75(9):4194-4198 (September 1978).
<input checked="" type="checkbox"/>	AT	15	Ulmer, J.B., et al., "Heterologous Protection Against Influenza by Injection of DNA Encoding a Viral Protein," <i>Science</i> 259(5102):1745-9 (March 1993).

DATE CONSIDERED

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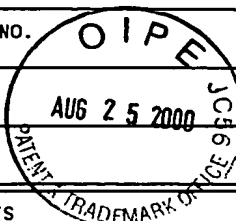
X	AR	16	Ulmer, J.B., et al., "DNA Vaccines for Bacteria and Viruses," <i>Adv. Exp. Med. Biol.</i> 397:49-53 (1996).
X	AS	16	Ulmer, J.B., et al., "DNA vaccines," <i>Curr. Opin. Immunol.</i> 8(4):531-536 (August 1996).
X	AT	16	Ulmer, J.B., et al., "Generation of MHC class I-restricted cytotoxic T lymphocytes by expression of a viral protein in muscle cells: antigen presentation by non-muscle cells," <i>Immunology</i> 89(1):59-67 (September 1996).

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X	AR	17	Ulmer, J.B., et al., "Toward the development of DNA vaccines," <i>Curr. Opin. Biotechnol.</i> 7(6):653-658 (December 1996).
X	AS	17	Vahlsing, H.L., et al., "Immunization with plasmid DNA using a pneumatic gun," <i>J. Immunol. Methods</i> 175(1):11-22 (September 1994).
X	AT	17	Vanderzanden, L., et al., "DNA Vaccines Expressing either the GP or NP Genes of Ebola Virus Protect Mice from Lethal Challenge," <i>Virology</i> 246(1):134-44 (June 1998).

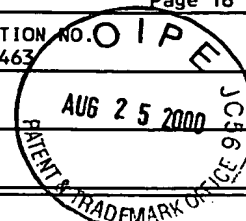
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X	AR	18	Wang, B., <i>et al.</i> , "Mucosal immunization with a DNA vaccine induces immune responses against HIV-1 at a mucosal site," <i>Vaccine</i> 15(8):821-825 (June 1997).
X	AS	18	Wheeler, C.J., <i>et al.</i> , "A novel cationic lipid greatly enhances plasmid DNA delivery and expression in mouse lung," <i>Proc. Natl. Acad. Sci. U S A.</i> 93(21):11454-11459 (October 1996).
X	AT	18	Wheeler, C.J., <i>et al.</i> , "Converting an alcohol to an amine in a cationic lipid dramatically alters the co-lipid requirement, cellular transfection activity and the ultrastructure of DNA-cytofectin complexes," <i>Biochim. Biophys. Acta</i> 1280(1):1-11 (April 1996).

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✓	AR	19	Yokoyama, M., et al., "DNA immunization: Effects of vehicle and route of administration on the induction of protective antiviral immunity," <i>FEMS Immunol. Med. Microbiol.</i> 14(4):221-230 (July 1996).
	AS	19	
	AT	19	

DATE CONSIDERED

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